

Serial No. 10/721,179

Docket No. K-0586

Amdt. dated January 6, 2006

Reply to Office Action of September 7, 2005

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A dryer, comprising:

a cabinet;

a drum provided in the cabinet and configured to be in rotational communication with a motor; and

a heater assembly coupled to the drum, comprising:

a heater case having an air passage formed therein;

a plate configured to partition the air passage into an upper passage and a lower passage; and

independent first and second coil arrays provided in the air passage and each configured to cross the plate between the upper and lower passages, wherein the first coil array comprises a plurality of first coils alternately positioned in the upper and lower passages, and the second coil array comprises a plurality of second coils alternately positioned in the upper and lower passages such that the first and second coils positioned in the upper passage form an alternating pattern, and the first and second coils positioned in the lower passage form an alternating pattern.

2. (Currently Amended) The dryer as claimed in claim 1, wherein ~~a~~the plurality of first coils of the first coil array are positioned at a predetermined distance from ~~a corresponding~~ the plurality of second coils of the second coil array.

3. (Previously Presented) The dryer as claimed in claim 1, wherein the first coil array is symmetrical to the second coil array along a predetermined line of symmetry of the air passage.

4. (Previously Presented) The dryer as claimed in claim 1, wherein each of the first and second coil arrays is electrically connected as a single unit.

5. (Currently Amended) The dryer as claimed in claim 1, wherein ~~the first and second coil arrays each comprise a~~ each of the plurality of first coils ~~provided at upper and lower portions of each coil array is positioned substantially directly across from a corresponding~~ second coil of the plurality of second coils on the opposite side of the plate.

6. (Currently Amended) The dryer as claimed in claim 5, wherein ~~the upper and lower portions of each of the first and second coil arrays~~ lie on centerlines of the upper and lower passages, respectively.

7. (Previously Presented) The dryer as claimed in claim 5, wherein the plurality of coils of the first coil array are positioned at a predetermined interval along an air flow direction from the corresponding plurality of coils of the second coil array.

8. (Previously Presented) The dryer as claimed in claim 1, wherein the first and second coil arrays are configured to alternately cross the plate so as to each form a zigzag pattern.

9. (Previously Presented) The dryer as claimed in claim 1, wherein the first and second coil arrays are configured to be separately controlled.

10. (Currently Amended) A heater assembly for a dryer, comprising:  
a heater case having an air passage formed therein;  
a plate configured to partition the air passage into an upper passage and a lower passage; and

independent first and second coil arrays provided in the air passage and configured to alternately cross the plate between the upper and lower passages, wherein the first coil array comprises a plurality of first coils alternately positioned in the upper and lower passages, and the second coil array comprises a plurality of second coils alternately positioned in

the upper and lower passages such that the first and second coils positioned in the upper passage form an alternating pattern, and the first and second coils positioned in the lower passage form an alternating pattern.

11. (Currently Amended) The heater assembly as claimed in claim 10, wherein ~~a~~the plurality of first coils of the first coil array are positioned at a predetermined distance from a ~~corresponding~~the plurality of second coils of the second coil array.

12. (Previously Presented) The heater assembly as claimed in claim 10, wherein the first coil array is symmetrical to the second coil array along a predetermined line of symmetry of the air passage.

13. (Previously Presented) The heater assembly as claimed in claim 10, wherein each of the first and second coil arrays is electrically connected as a single unit.

14. (Currently Amended) The heater assembly as claimed in claim 10, wherein ~~the a~~first and second coil arrays each comprise a plurality of coils provided at upper and lower portions of each coil of the first coil array is positioned between each set of adjacent second coils

in the lower passage, and a second coil of the second coil array is positioned between each set of adjacent first coils in the upper passage.

15. (Previously Presented) The heater assembly as claimed in claim 14, wherein upper and lower portions of each coil array lie on centerlines of the upper and lower passages, respectively.

16. (Currently Amended) The heater assembly as claimed in claim 14, wherein the plurality of first coils of the first coil array are positioned at a predetermined interval in an airflow direction from the corresponding plurality of second coils of the second coil array.

17. (Previously Presented) The heater assembly as claimed in claim 10, wherein the first and second coil arrays are configured to alternately cross the plate so as to form a zigzag pattern.

18. (Previously Presented) The heater assembly as claimed in claim 10, wherein the first and second coil arrays are configured to be separately controlled.

19. (Previously Presented) The dryer as claimed in claim 1, wherein the first and second coil arrays are configured to alternately cross the plate between the upper and lower passages.

20. (Previously Presented) The dryer as claimed in claim 3, wherein the plate is positioned along the predetermined line of symmetry of the air passage.

21. (Previously Presented) The heater assembly as claimed in claim 12, wherein the plate is positioned along the predetermined line of symmetry of the air passage.

22. (Canceled)

23. (Previously Presented) A dryer comprising the heater assembly of claim 10.

24. (Previously Presented) A heater assembly for a dryer, comprising:

a heater case;

a plate provided in the case and configured to partition the case into an upper portion and a lower portion;

a first coil array comprising a plurality of first coils, the plurality of first coils comprising a plurality of upper first coils positioned in the upper portion of the case, and a plurality of lower first coils positioned in the lower portion of the case; and

a second coil array comprising a plurality of second coils, the plurality of second coils comprising a plurality of upper second coils positioned in the upper portion of the case, and a plurality of lower second coils positioned in the lower portion of the case, wherein the first coil array is symmetrical to the second coil array about the plate.

25. (Previously Presented) The heater assembly as claimed in claim 24, wherein the first coil array is configured to operate as a single unit, and wherein the plurality of first coils are arranged in the first coil array such that the upper and lower first coils form an alternating pattern.

26. (Previously Presented) The heater assembly as claimed in claim 25, wherein the first coil array is configured to cross the plate as the first coil array alternates between the upper and lower first coils.

27. (Previously Presented) The heater assembly as claimed in claim 26, wherein the second coil array is configured to operate as a single unit independent of the first coil array, and

wherein the plurality of second coils are arranged in the second coil array such that the upper and lower second coils form an alternating pattern.

28. (Previously Presented) The heater assembly as claimed in claim 27, wherein the alternating pattern formed by the upper and lower first coils is a mirror image of the alternating pattern formed by the upper and lower second coils.

29. (Previously Presented) The heater assembly as claimed in claim 27, wherein the second coil array is configured to cross the plate as the second coil array alternates between the upper and lower second coils.

30. (Canceled)

31. (Previously Presented) The heater assembly as claimed in claim 24, wherein the first and second coil arrays each form a zigzag pattern.

32. (Previously Presented) A dryer comprising the heater of claim 24.



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33. (New) The heater assembly as claimed in claim 24, wherein the plurality of upper first and second coils form an alternating pattern in the upper portion of the case, and the plurality of lower first and second coils form an alternating pattern in the lower portion of the case.